feature, the determination of the updated position of the electronic device including performing periodic sampling of three dimensions of data of a plurality of images of the at least one facial feature to reduce jitter in the movement of the at least one facial feature upon triggering the updated camera feed for display on the electronic device.

12. The electronic device of claim **9**, further comprising at least one communication module to trigger transmission of the 6-DoF pose or the alternate 6-DoF pose to display the image features on the electronic device based on a plurality of detected movements of the electronic device.

13. The electronic device of claim **9**, wherein the 6-DoF pose and the alternate 6-DoF pose indicate a position of the electronic device relative to the at least one selected facial feature.

14. A computer program product tangibly embodied on a non-transitory computer-readable medium and comprising instructions that, when executed, are configured to cause at least one processor to:

obtain, from a first tracking system, an initial three-dimensional (3D) position of an electronic device in relation to image features captured by a camera of the electronic device;

obtain, from a second tracking system, an orientation associated with the electronic device; and

responsive to detecting a movement of the electronic device:

obtain, from the second tracking system, an updated orientation associated with the detected movement of the electronic device;

generate and provide a query to the first tracking system, the query corresponding to at least a portion of the image features and including the updated orientation and the initial 3D position of the electronic device;

receive, responsive to the query, a plurality of position changes for the portion of the image features in relation to the initial 3D position of the electronic device;

generate, for a sampled number of the plurality of position changes, an updated 3D position for the electronic device;

generate a 6-DoF pose using the updated 3D positions and the updated orientation for the electronic device; and

provide, for display on the electronic device, a camera feed depicting movement of the image features based on the movement of the electronic device, according to the generated 6-DoF pose.

15. The computer program product of claim **14**, wherein the updated 3D positions are generated using a periodic sampling of three dimensions of data for a plurality of image frames representing the position of the portion of the image features relative to the position of the electronic device.

16. The computer program product of claim **14**, wherein providing the camera feed depicting movement of the image features based on the movement of the electronic device according to the 6-DoF pose includes providing placement of virtual objects associated with the user in the camera feed according to the 6-DoF pose each time the electronic device is moved.

17. The computer program product of claim **14**, wherein the image features include:

portions of a face of a user being captured by the camera of the electronic device, the camera being a front facing camera; and

augmented reality content associated with the user being captured by the front facing camera.

18. The computer program product of claim **14**, wherein:

the first tracking system executes a facial feature tracking algorithm configured to determine 3D location changes for the image features associated with at least one selected facial feature; and

the second tracking system is an inertial measurement unit (IMU) installed on the electronic device.

19. The computer program product of claim **14**, wherein combining output from the first tracking system and output from the second tracking system enables tracking and placement of augmented reality content based on the generated 6-DoF pose, and responsive to the detected movement of the electronic device.

20. The computer program product of claim **14**, wherein obtaining the updated orientation associated with the detected movement of the electronic device from the second tracking system is performed in response to determining that the first tracking system is unable to provide both the position and orientation with 6-DoF.

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